Vermont Public Service Department
October 5, 2023
Response to Bidder Questions
RE RFP issued August 30, 2023: CLEAN HEAT STANDARD ASSESSMENT OF THERMAL SECTOR CARBON
REDUCTION POTENTIAL IN VERMONT

- 1. Regarding this requirement on p.13: "Each proposal submission must include one hard copy with original signature and one electronic copy (via email preferred)"; do you require the hard copy AND the electronic copy to be received by the stated deadline?
  - a. Receipt of one electronic copy via email by the deadline stated in the RFP is sufficient to meet the requirement of being on time. Receipt of one hard copy with original signature is also desired, however, physical receipt of the hard copy after the deadline has passed is acceptable.
- 2. On p. 15, the RFP states "Proposals should clearly identify any Vermont-based firms that may be included as subcontractors." Is there a requirement that local firms be included or otherwise factored into the evaluation criteria? This is not specifically mentioned in the "Selection Criteria".
  - a. There is no requirement to include Vermont based firms as part of the proposal.
     However, please name all subcontractors, including those based in Vermont, in your proposal.
- 3. Can the PSD clarify, expand, or give an example of the eligible clean heat measure "line extension that connects facilities with thermal loads to the grid" found on page 5 of the RFP?
  - a. Line extensions are applicable to residential, commercial, or industrial facilities that utilize delivered fossil fuel to meet energy needs that cannot otherwise be met by the existing (or non-existing) electric distribution utility service. For example, including but not limited to, extending an existing electric distribution line to replace fossil fuel-fired space and/or hot water heating as well as commercial processes related to maple syrup production (boiling sap and reverse osmosis).
- 4. Please confirm whether the Task 5 Optimization analysis is intended to be a single output (based on some weighted combination of the factors provided in the RFP), or if there is intended to be several optimization scenarios?
  - a. Task 5 is intended to be a single output. However, the Department is open to proposals that include more than one optimization scenario if that is what is necessary to arrive at the single output.
- To what degree is integration of future tech (ex. Green hydrogen) already considered in any existing forecasts of energy supply, or is the respondent expected to develop these forecasts?

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- a. Please see Vermont Gas Integrated Resource Plan¹ and Chapter 6 "Thermal and Process Energy Use" of the Vermont Comprehensive Energy Plan² ("CEP") which both provide some context on future technology such as Green Hydrogen and low-carbon alternatives. However, do not include numerical forecasts. In the context of the Potential Study, these types of future technology and supply are clean heat measures. Therefore, respondents should plan developing a forecasts of green hydrogen potential, at the different levels of potential being assessed, as part of Task 2.
- 6. Page 13 of the RFP requests that bidders provide both a hard copy and electronic copy of their proposals? Would the Department waive the requirements for the hard copy submission?
  - a. Receipt of one electronic copy via email by the deadline stated in the RFP is sufficient to meet the requirement of being on time. Receipt of one hard copy with original signature is also desired, however, physical receipt of the hard copy after the deadline has passed is acceptable.
- 7. Why does DPS exclude CO2 from wood combustion in the VGGEIF? Does DPS expect the winning contractor to exclude CO2 from wood combustion from the contractor's analysis and final product?
  - a. The Vermont Greenhouse Gas Emissions Inventory and Forecast ("VGGEIF") is compiled and maintained by the Vermont Agency of Natural Resources. An explanation of why the 1990-2020 VGGEIF doesn't include CO<sub>2</sub> from biogenic sources, including the combustion of woody biomass, can be found on pg9 and pg25 (PDF pg10 and pg26) of the VGGEIF <a href="here">here</a>, with some additional information on p6 (PDF p7) of the Methodology document <a href="here">here</a>.

The Affordable Heat Act directs the Department to conduct a study on the thermal sector, for which the Department is now seeking contractor bids. The basis for this Department potential study is Section 8125 of the Affordable Heat Act, which states that,

(A) a potential study conducted by the Department of Public Service, the first of which shall be completed not later than September 1, 2024, to include an assessment and quantification of technically available, maximum achievable, and program achievable thermal resources. The results shall include a comparison to the legal obligations of the thermal sector portion of the requirements of 10 V.S.A. § 578(a)(2) and (3).<sup>3</sup>

 $<sup>\</sup>frac{1}{https://vgsvt.com/wp-content/uploads/2022/03/2021-01-15-VGS-Integrated-Resource-Plan-including-Attachments-00306267-2xE4196.pdf}$ 

<sup>&</sup>lt;sup>2</sup> 2022VermontComprehensiveEnergyPlan\_0.pdf

<sup>&</sup>lt;sup>3</sup> Vt. Stat. Ann. tit. 30, § 8125(e)(1)(A).

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The Act defines the thermal sector to be consistent with the RCI emissions as described by VGGEIF. According to the Definitions section of the Affordable Heat Act,

'Thermal sector' has the same meaning as the 'Residential, Commercial and Industrial Fuel Use' sector as used in the Vermont Greenhouse Gas Emissions Inventory and Forecast..."<sup>4</sup>

The VGGEIF report refers to biogenic CO2 in the "Residential, Commercial and Industrial Fuel Use ('RCI')" section:

As discussed previously, biogenic emissions are not included in the gross emissions totals in this inventory. The biogenic CO2 values from the burning of wood (listed in Table 4) are included here for informational purposes only, and the methodology used for calculating these totals, as well as the IPCC guidance related to biogenic emissions, is discussed in the Methodology document.<sup>5</sup>

In the Overview section of Vermont GHG by Sector, the report states that: "Emissions of biogenic carbon dioxide, which are produced from the burning, breaking down, or processing of biologically-based material, are not included in the overall gross totals in the inventory based on IPCC inventory guidelines."

The VGGEIF identifies that gross biogenic  $CO_2$  emissions are not included in the RCI inventory. They are listed for informational purposes only. This is consistent with IPCC inventory guidelines. Biogenic  $CO_2$  accounting is included in the land-use, land use change, and forestry (LULUCF) section of the VGGEIF.

Wood-based technologies should be included in this potential study because the Affordable Heat Act specifically requires consideration of "advanced wood heating" as an eligible measure<sup>7.</sup> CO<sub>2</sub> from wood combustion should be accounted for as it is treated in the VGGEIF.

<sup>&</sup>lt;sup>4</sup> Vt. Stat. Ann. tit. 30, § 8123(13).

<sup>&</sup>lt;sup>5</sup>https://outside.vermont.gov/agency/anr/climatecouncil/Shared%20Documents/\_Vermont\_Greenhouse\_Gas\_Emissi ons\_Inventory\_Update\_1990-2020\_Final.pdf at 13.

<sup>&</sup>lt;sup>6</sup> *Id*. At 9.

<sup>&</sup>lt;sup>7</sup> Vt. Stat. Ann. tit. 30, § 8127(d)(7).